



August 26, 2009

Bryan Walters
Spectra Energy

Dear Mr. Walters:

Thank you for the opportunity to review information concerning the product Omala Oil RL 320. According to the Material Safety Data Sheet (MSDS), the product is gear lubricant that contains a blend of polyolefins and additives. It is my understanding that the oil was released when the Steckman Ridge compressor station experienced an emergency shutdown. During the emergency shutdown, an oily mist was released from the emergency shutdown stack and may have resulted in a light oily film on some areas of adjacent property. I have summarized some important facts that are known about the health effects of these types of oils.

By way of introduction, I am a Principal Toxicologist and Partner at the Center for Toxicology and Environmental Health (CTEH), L.L.C. an environmental consulting firm that is a University of Arkansas for Medical Sciences Bioventures Program Associate. CTEH is a privately owned environmental consulting firm that has several specialties including toxicology and risk assessment. I am also an adjunct assistant professor in the Fay W. Boozman College of Public Health, Department of Environmental and Occupational Health, University of Arkansas for Medical Sciences (UAMS). As a lecturer, I speak on toxicology, government regulations, and risk assessment subjects to toxicology and industrial hygiene graduate students.

Lubricating oils have low toxicity to humans. The MSDS for the product indicates it may cause slight irritation to the eyes, effects on the skin after prolonged contact with the oil, and that it has low toxicity when swallowed. Although most people would not deliberately swallow oil, the reference Medical Toxicology (1988) lists swallowing a teaspoon of lubricating oil as being "nontoxic." Ingestion of large amounts of many types of oils may cause a laxative effect and some oils such as mineral oil are sold as laxatives. However, it is unlikely that a person touching an oily surface and putting their hands in their mouth could swallow sufficient oil to cause this type of effect. Small amounts of oil that are swallowed would not be significantly absorbed into the body.

The MSDS indicates that skin effects only occur after prolonged or repeated skin contact without proper cleaning. The oil can be removed from the skin and clothing with soap and water.

Because of its physical nature, the gear oil is unlikely to become airborne after it settles on a surface. For this reason, persons are unlikely to breathe the settled oil.

Additional toxicology references indicate the low toxicity of lubricating oils, stating

Provided that excessive skin contact and exposure to high concentrations of oil mist are avoided, lubricating oils do not present any significant health risks. (CONCAWE, 1997)

Similar to humans, the potential for adverse effects of the oil on pets such as dogs and cats is low. If a pet is noticeably oiled, the appropriate pet shampoo can be used to clean the oil from the skin or fur of the animal.

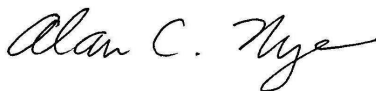
Edible vegetables or fruits that may have been oiled should be discarded unless they can be cleaned with soap and water.

References

CONCAWE 1997. Product Dossier 97/108. Lubricating oil basestocks. Prepared by CONCAWE's Petroleum Products and Health Management Groups

Medical Toxicology: Diagnosis and Treatment of Human Poisoning. M.J. Ellenhorn and D.G. Barceloux, Eds. Elsevier. New York

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